

AMENDMENTS TO THE CLAIMS

What is claimed is:

- 5 1. (Currently Amended) A continuous manufacturing system for composite aluminum panels comprising;
- a continuous expanding device ~~CE~~ for expanding raw material of a core ~~consisting of~~ comprising:
- _____ a first cramp 21—for holding raw material 2a—before expansion (pre-
10 expanding)—for manufacturing a honeycomb type core, which is disposed at a right part of a
raw material supplier,—
- _____ a the raw material supplier S—that comprising:
- _____ a pusher 29—for pushing raw material having a number of U type
grooves 29'in a certain space, wherein the pusher —is fixed on the—an right upper end of
15 □ type brackets-20,20',—
- _____ a number—plurality of sliding rods 31—installed from the raw material supplier
to a vicinity of a transferring roller for sliding raw material 2a—for the core—and—the core
2,—
- _____ a subsidiary cramp 22— for holding fixedly a right side of the core, which is
20 disposed at the right part of the first cramp, that—reciprocatesthe subsidiary cramp
reciprocating from side to side on racks 37, by means of a cylinder (not shown in Figs) and
simultaneously is—ascendedascends and is—deseendeddescends by means of perpendicular
cylinders 34,—
- _____ a second cramp 23—for expanding a—the raw material for the core to a right side
25 of a main body, which is disposed at the right part of the subsidiary cramp, that
reciprocatesthe second cramp reciprocating from side to side by means of a cylinder (not
shown in Figs) and ascends and descends by means of perpendicular cylinders-35,35',—
- _____ a the transferring roller 25—running idle for transferring an expanded core that
by cooperating the second cramp, which is situates—situated at the right end—side of the main

body-B; and—

~~a the main body AH of a continuous manufacturing system for composite aluminum panels consisting of~~comprising:

5 ~~_____ a suppling first supplying part E for providing upper and lower sides of the~~
~~expanded honeycomb type core with top and bottom aluminum plates 3,3', by passing~~
~~through rollers 5,5', 6,6'... from the upper and lower rollers 4, the upper and lower sides of~~
~~said expanded honeycomb type core 2;~~

~~_____ a suppling second supplying part F for providing adhering materials, which is~~
~~disposed between the upper and lower rollers,~~

10 ~~_____ a combination part L for combining the aluminum plates, the adhering~~
~~materials and the expanded honeycomb type core, which comprising includes the upper and~~
~~lower rollers 8,8';~~

~~a hot pressing part P for pressing composite aluminum panels supplied from the~~
~~combination part, the hot pressing part comprising:~~

15 ~~_____ upper and lower rollershot pressings 11,11', 12;~~

~~_____ hot pressing and supporting rollers;~~ and

~~a finishing part M comprising:~~

~~_____ a quick cooling apparatus 14;~~

~~_____ a slow cooling apparatus 15;~~

20 ~~_____ an adhering roller 17 for protecting tape;~~

~~_____ a side cutter 18 for cutting sides of completed panel; and~~

~~_____ a roller 16 for pinching the completed panel established in sequence behind~~
~~said the hot pressing part P.~~

25 2. (Currently Amended) A continuous manufacturing system for composite
aluminum panels in accordance with claim 1 in which said first cramp 21 comprises
perpendicular cylinders 33, for ascending and descending the first cramp 21, a cylinder 27
for reciprocating from side to side ~~it~~ on racks 37, 37' established on ~~the~~ an upper part of a
the main body B and ~~its~~ an outer end ~~is~~ — mounted on a perpendicular plate 10 of said main
30 body-B.

3. (Currently Amended) A continuous manufacturing system for composite aluminum panels in accordance with claim 1 in which said raw material supplier ~~S~~ is mounted on ~~the~~ a perpendicular plate ~~10~~ fixed on ~~the~~ an upper end of the main body ~~B~~ and reciprocated from side to side by means of cylinders ~~28, 28'~~ connected with lower ends of ~~said~~ the brackets.

4. (Currently Amended) A continuous manufacturing system for composite aluminum panels in accordance with claim 1 in which ~~the~~ a front side of ~~the~~ a most outer rod of said ~~a number~~ plurality of sliding rods ~~31~~ for sliding raw material ~~2a~~ for the core ~~and the core 2~~ are is connected with a centering handle 32 controlling ~~their~~ a ~~positions~~ position in a front and in the rear, and their right and left ends are mounted on the grooves ~~29~~ of of said pusher 29 and on a length-wise supporter 30 ~~equipped~~ provided under ~~a~~ the transferring roller 25 which mounted on the right end of the expanding device ~~CE~~,
15 respectively.

5. (Currently Amended) A continuous manufacturing system for composite aluminum panels in accordance with claim 1 in which said ~~supplying~~ supplying part F for providing adhering materials comprises any one device selected from a device for providing hot-melt films ~~7~~, ~~rollers~~ 7a, providing film, an ~~applicator~~ applicator (~~not shown in Figs~~) spraying hot melting thermoplastic resin adhesive and a device (~~not shown in Figs~~) for spraying liquid thermosetting resin adhesive.

6. (Currently Amended) A continuous manufacturing system for composite
25 aluminum panels in accordance with claim 5 in which said hot melting thermoplastic resin adhesive is made from ~~any one of~~ thermoplastic resins selected from polyethylene, polyisobutylene, polyamide, ethylene vinyl acetate copolymer and polyurethane.

7. (Currently Amended) A continuous manufacturing system for composite aluminum panels in accordance with claim 5 in which said liquid thermosetting resin adhesive made from ~~any one of~~ thermosetting resins selected from epoxy or phenol resin.

5 8. (Currently Amended) A continuous manufacturing system for composite aluminum panels in accordance with claim 1 in which between, before or behind the combination part ~~L~~ and the hot pressing part ~~P~~, a thickness controlling part D consisting of rollers ~~9,~~ for controlling thickness, and a side supporting part ~~G~~ consisting of apparatuses ~~13, 13', for supporting sides of the~~ a completed panel be established are provided.

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